

In the Specification

Please substitute the following title of the invention on page 1, line 1:

Protein Kinases

A POLYPEPTIDE HAVING KINASE ACTIVITY OR WHICH ACTIVATES THE MAP
KINASE PATHWAY

Please substitute the following paragraph on page 1, beginning at line 10, which was added by Applicants' Amendment dated August 31, 2005:

The Sequence Listing for this application is ~~on duplicate compact discs labeled "Copy 1" and "Copy 2."~~ "seq-listing-replacement.txt", which was ~~Copy 1 and Copy 2 each contain only one file~~ named "SER-102-Seq-List.txt" which was created on ~~August 24, 2005~~ September 17, 2007, and is ~~116 153 KB. The entire contents of each of the computer discs are~~ is incorporated herein by reference in ~~their entireties~~ its entirety.

Please substitute the following paragraph on page 57, beginning at line 26:

Figure 2: Alignment generated by BLAST between SEQ ID NO:42 (INSP081 full protein sequence, identified as "Query") and the top hit, (AB035267, SEQ ID NO: 165, identified as "Sbjct") Nck-interacting kinase-like embryo specific kinase from *Mus. musculus*.

Please substitute the following paragraph on page 58, beginning at line 1:

Figure 4: Alignment generated by BLAST between SEQ ID NO:100 (INSP082 full protein sequence, identified as "Query") and the top hit, (AB035267, SEQ ID NO: 166, identified as "Sbjct") Nck-interacting kinase-like embryo specific kinase from *Mus. musculus*.

Please substitute the following paragraphs on page 58, beginning at line 6:

Figure 6: Alignment generated by BLAST between SEQ ID NO:158 (INSP091 full protein sequence, identified as "Query") and the top hit, (AB035267, SEQ ID NO: 166, identified as "Sbjct") Nck-interacting kinase-like embryo specific kinase from *Mus. musculus*.

Figure 7: CLUSTAL alignment of INSP081 (SEQ ID NO: 42), 082 (SEQ ID NO: 100), 091 (SEQ ID NO: 158) & published ZC4 (SEQ ID NO: 167; see WO 99/53036) coding sequences.

Figure 8: Nucleotide sequence (SEQ ID NO: 168) with translation (SEQ ID NO: 169) of INSP082 PCR product cloned using primers INSP082-CP1 (SEQ ID NO: 159) and INSP082-CP2 (SEQ ID NO: 160).

Figure 9: Nucleotide sequence (SEQ ID NO: 170) with translation (SEQ ID NO: 171) of INSP082 PCR product cloned using primers INSP082-CP3 (SEQ ID NO: 161) and INSP082-CP4 (SEQ ID NO: 162).

Please substitute the following Table 1 on page 60:

Table 1: INSP082 cloning primers

| Primer | Sequence (5'-3') | <u>SEQ ID NO:</u> |
|---------------|-------------------------------|--------------------------|
| INSP082-CP1 | AGG AAC AGT ACA CCG TGA GA | <u>159</u> |
| INSP082-CP2 | AGT CGT GGA GGT GCC TTA AT | <u>160</u> |
| INSP082-CP3 | TAG GAA GGC GAG TGA GAG TG | <u>161</u> |
| INSP082-CP3 | CCG GTG AAT TAC TCG GTG TG | <u>162</u> |

Please substitute the following Table 2 on page 60:

Table 2: INSP082 sequencing primers

| Primer | Sequence (5'-3') | <u>SEQ ID NO:</u> |
|---------------|------------------------------|--------------------------|
| T7 primer | TAA TAC GAC TCA CTA TAG G | <u>163</u> |
| T3 primer | ATT AAC CCT CAC TAA AGG | <u>164</u> |

Please amend page 107 (Abstract of the Disclosure), beginning at line 2 which was submitted with Applicants' Preliminary Amendment dated March 4, 2005:

The present invention relates to novel human proteins, termed INSP081, INSP082, and INSP091, herein identified as members of the Germinal Center Kinase (GCK) subfamily of the STE20 family of protein kinases, ~~preferably as NCK-interacting kinases (NIKs) and more preferably as NIK-like embryo-specific kinases (NESKs),~~ and to the use of these and nucleic acid sequences from the encoding genes in the diagnosis, prevention, and treatment of disease.

Please substitute pages 1-58 (Sequence Listing) with the accompanying Sequence Listing.